

Table of Contents

Volume 7 Number 1

February 2018

Comparison of Stereotactic Body Radiotherapy Delivery Techniques for Early-Stage Lung Cancer Using Lung Toxicity Modeling

C. H. Han, T. E. Schultheiss, J. Y. C. Wong.....1

CT Output Dose Performance-Conventional Approach Verses the Dose Equilibrium Method

A. Albngali, A. Shearer, W. van der Putten, B. Tuohy, N. Colgan.....15

Applicability of Lung Equivalent Phantom Using the Cork with Absorbed Water in Radiotherapeutic Dosimetry

H. Fuse, T. Fujisaki, R. Ikeda, Z. Hakani.....27

Disposable Condenser Dosimeter Using a Skin-Insulated Mini-Substrate with a Silicon X-Ray Diode in Image-Guided Radiation Therapy

S. Yamaguchi, E. Sato, R. Nakamura, H. Oikawa, H. Kakuhara, K. Kikuchi, H. Ariga, S. Ehara.....35

Dosimetric Comparison between Bone and Target Matching Considering Interfractional Prostate Motion in Volumetric Modulated Arc Therapy

R. Nakahara, K. Ishii, N. Wakai, R. Kawamorita, W. Okada, S. Kishimoto,
K. Kubo, T. Nakajima, M. Hasegawa.....47

Effective Atomic Number Measurement with Energy-Resolved Computed Tomography Using Two-Dimensional “transXend” Detector

H. Iramina, M. Nakamura, T. Mizowaki, I. Kanno.....61

Comparison of Gamma Pass Rate between the Dose-to-Water and Dose-to-Medium Reporting Modes for Patient-Specific QA Using a Helical Diode Array Dosimeter with a Fixed Phantom Density

H. Hirashima, M. Nakamura, Y. Ishihara, N. Mukumoto, M. Akimoto,
T. Tomita, Y. Hirose, K. Kitsuda, T. Ishigaki, T. Mizowaki.....74

Variations in Tomotherapy Beam Outputs: A Multiple-Institutional Investigation

H. Shimizu, K. Sasaki, K. Sugi, H. Fukuma, T. Nakabayashi, T. Isomura, H. Tachibana, T. Kodaira.....87

A Quality Assurance Approach for Linear Accelerator Mechanical Isocenters with Portal Images

Q. Fan, S. Zhou, Y. Lei, S. Li, M. Zhang.....100

Detection of Spherical Gold Fiducials in kV X-Ray Images Using Intensity-Estimation-Based Method

M. Kokubo, M. Yamada, A. Sawada, N. Mukumoto, Y. Miyabe, T. Mizowaki, M. Hiraoka.....115